

OCT 07 2005

PIPER RUDNICK
GRAYCARYDLA Piper Rudnick Gray Cary US LLP
153 Townsend Street, Suite 800
San Francisco, California 94107-1907
O 415.836.2522
F 415.836.2501
W www.dlapiper.comPART 1 of 2
Pp. 1-10 plus transmittals

FAX TRANSMISSION COVER SHEET

October 6, 2005

To:

Attn.: Group Art Unit 3738
United States Patent and Trademark
Office

Telephone:

Fax Number:

(571) 273-8300

From: Andrew V. Smith (Reg. No. 43,132) Client-Matter Number: 355004-991501
415.836.2500Re: U.S. Patent Application No. 09/811,360
Filing Date: March 16, 2001
First Named Inventor: Eugene M. Wolf
Art Unit: 3738
Examiner: Javier G. Blanco
Attorney Docket No.: 355004-991501Pages: ~~25~~¹⁴ (including this form) Originals:

If there is a problem with this transmission, please call _____ at _____

Fax Operator/Ext.

Message:

Please see attached for filing in the above-identified U.S. patent application.

RESEND DUE TO AUTO-REPLY SHOWING ALL
PAGES NOT RECEIVED.

CONFIDENTIALITY NOTICE

This communication is ONLY for the person named above. Unless otherwise indicated, it contains information that is confidential, privileged or exempt from disclosure under applicable law. If you are not the person named above, or responsible for delivering it to that person, be aware that disclosure, copying, distribution or use of this communication is strictly PROHIBITED. If you have received it in error, or are uncertain as to its proper handling, please immediately notify us by collect telephone and mail the original to us at the above address. Thank you.

Serving clients globally

SF3115923.1
355004-991501

Appl. No. 09/811,360
Amendment dated October 6, 2005
Reply to Office Action mailed May 12, 2005

Attorney Docket No. 355004-991501

a stabilizing, non-intramedullary base extension including multiple fins for efficient rotational stabilization of the humeral head fixation on a cut humeral surface configured for coupling with the cut humeral surface;

preparing a humeral surface for coupling the stemless partial humeral head fixation thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the stemless partial humeral head fixation to the humeral surface including cement or ingrowth fixation of the humeral head with the humeral surface, thereby recreating the anatomic proximal humeral configuration, wherein the base surface of the partial humeral head contacts or substantially mates with the cut humeral surface when coupled therewith and the non-intramedullary base extension is impacted into the cancellous region, and

wherein the multiple fins are uniformly planar along their entire extents and directly intersect at a center of the base surface, said center having a diameter that is approximately equal to a thickness of each of said fins, such that each said multiple planar fin protrudes radially along a plane from the center of the base surface where it intersects with each of the other fins.

Claim 26 (Cancelled)

Claim 27 (Cancelled)

Claim 28 (Previously presented): The method of Claim 25, wherein the planar shape of the fins is triangular.

Claim 29 (Previously presented): The method of any of Claims 23-25, wherein said intersecting fins form a cruciform shape.

Appl. No. 09/811,360
Amendment dated October 6, 2005
Reply to Office Action mailed May 12, 2005

Attorney Docket No. 355004-991501

Claim 30 (Previously presented): The method of Claim 25, wherein the protruding base extension further includes at least one linear extension.

Claim 31 (Previously presented): A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head fixation having a humeral head including a base surface and a non stem-bearing, stabilizing, non-intramedullary base extension including multiple fins for rotational stabilization of the humeral head fixation on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head fixation thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head fixation to the humeral surface, thereby recreating the anatomic proximal humeral configuration, wherein the base surface of the partial humeral head contacts or substantially mates with the cut humeral surface when coupled therewith and the non-intramedullary base extension is impacted into the cancellous region, and

wherein the multiple fins are formed to have a cruciform shape and are uniformly planar along their entire extents and directly intersect at a center of the base surface, said center having a diameter that is approximately equal to a thickness of each of said fins, such that each said multiple planar fin protrudes radially along a plane from the center of the base surface where it intersects with each of the other fins.

Claim 32 (Original): The method of Claim 31, wherein the base extension includes two or more linear extensions.

Claim 33 (Previously presented): The method of any of Claims 25 or 31, wherein the coupling step includes the step of impacting the base extension into

Page 9 of 18

SP3115920.1
355004-991501

Appl. No. 09/811,360
Amendment dated October 6, 2005
Reply to Office Action mailed May 12, 2005

Attorney Docket No. 355004-991501

the cancellous interior of the cut humeral surface, wherein the periphery of the humeral head fixation rests on the cortical margins of the humeral surface following the coupling.

Claim 34 (Previously presented): The method of any of Claims 25 or 31, wherein the coupling step includes the step of adhesively coupling the partial humeral head fixation to the humeral surface.

Claim 35 (Original): The method of Claim 34, wherein the adhesive is surgical cement.

Claim 36 (Previously presented): The method of any of Claims 25 or 31, wherein the coupling step includes the step of press-fitting the humeral head fixation to the humeral surface.

Claim 37 (Previously presented): The method of any of Claims 25 or 31, further comprising selecting a shape and size of the periphery of the base of the humeral head fixation from a variety of shapes and sizes for matching the specific shape and size of the anatomic neck of the cut humeral surface.

Claim 38 (Original): The method of any of Claims 25 or 31, further comprising the step of inserting a template punch into the cancellous of the cut humeral surface prior to performing the coupling step.

Claim 39 (Previously presented): The method of Claim 38, wherein the base extension is a total or partial male complement to a female template punch.

Claim 40 (Cancelled)

Page 10 of 18

SF3115920.1
355004-991501